

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 00-017

NPDES PERMIT NO. CA0037737

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

NORTH SAN MATEO COUNTY SANITATION DISTRICT,  
DALY CITY  
SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

**PURPOSE OF ORDER**

1. North San Mateo County Sanitation District (hereinafter referred to as NSMCSD) submitted a Report of Waste Discharge for re-issuance of waste discharge requirements and a permit to discharge wastewater to waters of the State and the United States under the National Pollutant Discharge Elimination System (NPDES).
2. This discharge was previously regulated by Waste Discharge Requirements in Order No. 94-140, adopted by the Board on September 21, 1994.

**FACILITY DESCRIPTION**

3. The discharger owns and operates the treatment plant located at Daly City (Attachment A). The plant provides secondary level treatment for domestic and commercial wastewater from the City of Daly City and portions of San Mateo County, the Town of Colma, San Francisco County Jail and the Westborough Water District within the City of South San Francisco. The discharger's service area has a present population of 120,027. The treatment plant has an average dry weather flow design of 8.0 million gallons per day (mgd), and can treat up to 25 mgd during the wet weather flow period. The plant presently discharges an annual average flow of 6.85 mgd.
4. The U.S. Environmental Protection Agency (USEPA) and the Board have classified this discharge as a major discharger.
5. Wastewater treatment consists of influent coarse bar screening, primary sedimentation with flow equalization, secondary treatment and sedimentation, chlorination and dechlorination. Flow equalization is only used when necessary. A treatment process schematic diagram is included as Attachment B.

6. Treated wastewater is currently discharged into the Pacific Ocean, a water of the State and United States, through the Vista Grande Tunnel structure and a 27" force main located on Ocean Beach, San Francisco County, through a submerged diffuser about 2,500 feet from the outfall structure on the beach. The diffuser is located at a depth of 32 feet below water (latitude 37 deg. 42 min. 48 sec.; longitude 122 deg. 30 min. 50 sec.), with an initial dilution ratio of 70:1.
7. Sludge is treated by gravity thickeners, air floatation thickeners, anaerobic digesters, and centrifuges with final disposal to a sanitary landfill or to a qualified biosolids reuse facility or project. The Regional Board will be notified in advance of any changes in disposal of the material.

#### **APPLICABLE PLANS AND POLICIES**

8. The State Water Resource Control Board adopted a revised "Water Quality Control Plan for the Ocean Waters of California" (California Ocean Plan) on July 23, 1997.

#### **PRETREATMENT PROGRAM**

9. On June 17, 1983, the discharger's Pretreatment Program received final approval by the EPA. By letter dated January 4, 1995, the discharger requested that its Pretreatment Program be removed from the Federal Pretreatment Program Requirements.
10. Pursuant to 40 Code of Federal Regulations (CFR) Part 403, the discharger is required to develop and implement an approved Pretreatment Program. However, all discharges to the treatment plant are either residential flows or commercial flows that are similar in quality and quantity to residential discharges. Therefore, the discharger had been determined to not meet the criteria of having to implement a local pretreatment program and was removed and deleted from having to maintain an approved pretreatment program in Order No. 95-015. This Order continues to find that the discharger is not required to implement an approved pretreatment Program

#### **BENEFICIAL USES**

11. The Ocean Plan contains water quality objectives and beneficial uses for the Pacific Ocean. The beneficial uses of the Pacific Ocean are as follows:
  - Industrial water supply
  - Water contact recreation
  - Non-contact water recreation
  - Aesthetic enjoyment
  - Navigation
  - Commercial and sport fishing

- Mariculture
- Preservation and enhancement of Areas of Special Biological Significance
- Preservation of rare and endangered species
- Marine habitat
- Fish migration
- Fish spawning
- Shellfish harvesting

## CHRONIC TOXICITY

12. In 1986 the Board initiated the Effluent Toxicity Characterization Program (ETCP) in which certain major dischargers (including NSMCSD) were required to monitor their effluent using critical life stage toxicity tests to generate information on toxicity testing for species sensitivity and effluent variability to allow development of appropriate chronic toxicity effluent limitations.

The result from the ETCP shows that NSMCSD currently does not need chronic toxicity limitations; however, this permit may be amended in the future to include chronic toxicity effluent limits and monitoring requirements.

## STORMWATER

13. Federal Regulations for stormwater discharges were promulgated by the U.S. Environmental Protection Agency on November 19, 1990. The regulations [40 CFR Parts 122, 123, and 124] require specific categories of industrial activities including Publicly Owned Treatment Works (POTWs) which discharge storm water associated with industrial activity (industrial stormwater) to obtain an NPDES permit and to implement Best Available Technology Economically Available (BAT) and Best Conventional Pollutant Control Technology (BCT) to control pollutants in industrial stormwater discharges.

Stormwater flows from the wastewater treatment facility process areas are directed to the headworks of the treatment plant. These flows are exempt from industrial stormwater permitting based on U.S. EPA March 12, 1992 Q&A Guidance.

## OTHER FINDINGS

14. An **Operations and Maintenance Manual** is maintained by the Discharger for purposes of providing plant, collection system, and regulatory personnel with a source of information describing all equipment, recommended operation strategies, process control monitoring, and maintenance activities. In order to remain a useful and relevant document, the manual must be kept updated to reflect significant changes in treatment and collection facility equipment and operation practices.

15. This Order serves as an NPDES permit, adoption of which is exempted from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code [California Environmental Quality Act (CEQA)] pursuant to Section 13389 of the California Water Code.

## **NOTIFICATIONS AND MEETINGS**

16. The Discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided an opportunity to submit their written views and recommendations.
17. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

**IT IS HERE BY ORDERED**, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

### **A. DISCHARGE PROHIBITIONS**

1. Discharge of treated wastewater at locations or in a manner different from that described in Findings 5, 6, 7 and 12 is prohibited.
2. The average dry weather flow discharge shall not exceed 8.0 mgd. The average dry weather flow shall be determined over three consecutive dry weather months each year.
3. Discharge of water, materials or wastes which are not otherwise authorized by this NPDES permit, to a storm drain system or waters of the State are prohibited.
4. The discharge of municipal and industrial waste sludge either directly or indirectly to the ocean, or into a waste stream that discharges to the ocean, is prohibited. The discharge of sludge digestion supernatant directly to the ocean, or into a waste stream that discharges to the ocean without further treatment is prohibited.
5. Discharge shall be essentially free of material that is floatable or will become floatable upon discharge.
6. Discharge shall be essentially free of settleable material or substances that may form sediments which will degrade benthic communities or other aquatic life.

7. Discharge shall be essentially free of substances that will accumulate to toxic levels in marine waters, sediments or biota.
8. Discharge shall be essentially free of substances that significantly decrease the natural light to benthic communities and other marine life.
9. Discharge shall be essentially free of materials that result in aesthetically undesirable discoloration of the ocean surface.

## B. EFFLUENT LIMITATIONS

The term "effluent" in the following limitations means the fully treated wastewater effluent from the discharger's wastewater treatment facility, as discharged to the Pacific Ocean.

1. The effluent discharged to the Pacific Ocean shall not exceed the following limitations:

Constituent		Units	Monthly Average	Weekly Average	Daily Average	Maximum at any Time
a.	Carbonaceous Biochemical Oxygen Demand (CBOD <sub>5</sub> , 20°C)	mg/l	25	40	50	
b.	Grease and Oil	mg/l	25	40	--	75
c.	Suspended Solids	mg/l	30	45	60	
d.	Settleable Solids	ml/l-hr	1.0	1.5	--	3.0
e.	Turbidity	NTU	75	100	--	225
f.	Acute Toxicity (1)	TUa	1.5	2.0	--	2.5

(1) Toxicity Concentration shall be determined as follows:

$$TUa = 100/96\text{-hr LC } 50\%$$

Where LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static renewal bioassay techniques using standard test species.

When it is not possible to measure the 96-hour LC<sub>50</sub> due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \frac{\text{Log } (100-S)}{1.7}$$

S= percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

2. **pH:** The pH of the discharge shall not exceed 9.0 nor be less than 6.0.
3. **Total Coliform Bacteria:**  
The treated wastewater, at some place in the treatment process prior to discharge, shall meet the following limits of bacteriological quality: The moving median value for the Most probable Number (MPN) of total coliform bacteria in any five (5) consecutive samples shall not exceed 2400 MPN/100 ml. In addition, any single sample shall not exceed 24,000 MPN/100 ml.
4. **85 Percent Removal, BOD and TSS:**  
The arithmetic mean of the biochemical oxygen demand (five-day, 20OC) and total suspended solids values, by weight, for effluent samples collected in each calendar month shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period.
5. **Interim Total Coliform Bacteria Limit:** Effluent Limitation B.3 (Total Coliform Bacteria) shall be suspended during the bacterial Assessment Study period as proposed in Provision E.9. During the study period, the discharger shall comply with Coliform requirements specified in Receiving Water Limitations C.5.

## C. RECEIVING WATER LIMITATIONS

The discharge of waste shall not cause the following conditions to exist in waters of the State. Compliance shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed.

1. Physical Characteristics
  - a. Floating, particulates and grease and oil shall not be visible.
  - b. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
  - c. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
  - d. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

## 2. Chemical Characteristics

- a. The dissolved oxygen concentration shall not at any time be depressed more than ten percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste material.
- b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- c. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- d. The concentration of substances set forth in Chapter IV, Table B of the Ocean Plan, in Marine sediments shall not be increased to levels that would degrade indigenous biota.
- e. The concentration of organic materials in marine sediments shall not be increased to levels, which would degrade marine life.
- f. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.

## 3. Biological Characteristics

- a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
- b. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
- c. The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

## 4. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

## 5. Bacterial Characteristics

- a. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Regional Board, the following bacteriological objectives shall be maintained throughout the water column:

- (i) Samples of water from each sampling station shall have a concentration of total coliform organisms less than 1,000 per 100 ml; provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml, and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100ml.
- (ii) The fecal coliform concentration based on a minimum of not less than five samples for any 30 day period, shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60 day period exceed 400 per 100 ml.

#### 6. Shellfish Harvesting

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacteriological objectives shall be maintained throughout the water column:

The median total coliform concentration shall not exceed 70 per 100 ml, and not more than 10 percent of the sample shall exceed 230 per 100 ml.

### **D. SLUDGE MANAGEMENT PRACTICES**

1. All sludge generated by the discharger must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR Part 503. If the discharger desires to dispose of sludge by a different method, a request for permit modification must be submitted to the USEPA 180 days before start-up of the alternative disposal practice. All the requirements in 40 CFR 503 are enforceable by USEPA whether or not they are stated in an NPDES permit or other permit issued to the discharger.
2. Sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, or result in groundwater contamination.
3. The sludge treatment and storage site shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the temporary storage site. Adequate protection is defined as protection from at least a 100-year storm and protection from the highest possible tidal stage that may occur.
4. Should NSMCSD reuse or dispose of biosolids in a manner subject to pathogen and vector reduction requirements of 40 CFR 503 then the NSMCSD shall submit an annual report to the USEPA and the Board containing monitoring results and pathogen and vector attraction reduction requirements as specified by 40 CFR 503, postmarked by February 19 of each year, for the period covering the previous calendar year.



5. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR 258. In the annual self-monitoring report, the discharger shall include the amount of sludge disposed of, and the landfill(s) to which it was sent.
6. This permit does not authorize permanent on-site sludge storage or disposal activities. A report of Waste Discharge shall be filed and the site brought into compliance with all applicable regulations prior to commencement of any such activity by the discharger.
7. General Provisions of this Board's "Standard Provisions and Reporting Requirements," dated August 1993, apply to sludge handling, disposal and reporting practices.
8. The Board may amend this permit prior to expiration if changes occur in applicable state and federal sludge regulations.

#### **E. PROVISIONS**

1. **Permit Rescission:** Requirements prescribed by this order supersede the requirement prescribed by Order No.94-140. Order No. 94-140 is hereby rescinded.
2. **Mass Emission Limitations:** Where concentration limitations in mg/l or µg/l are contained in this permit, Mass Emission Limitations, determined in accordance with the attached Standard Provisions, Section G (Definitions), Paragraphs 12 and 13, shall also apply
3. **Treatment Facility Performance Goals:** The performance goals are based upon the performance of the discharge facility and are used only as an indication of the efficiency of the treatment facility. They are not considered as limitations for the regulation of the treatment facility.

The Regional Board believes that the discharger should make every reasonable effort to maintain the following treatment facility performance goals (performance goals).

Any exceedance of performance goals will not be considered a violation of this Order and shall be reported in the monthly report to the Regional Board.

In case of an exceedance, the discharger shall increase effluent sampling for the constituent in exceedance of the performance goal in accordance with the sampling frequency increase provisions specified in Part B, Table 1, Footnotes 4 and 8. The increased monitoring shall continue until the sampling results no longer show an exceedance of the performance goal.

In the report to the Regional Board, the discharger shall document the constituent in exceedance, the duration and the cause of exceedance, and any mitigation or correction action to prevent future exceedances.

The performance goals are as follows:

Constituent		Units	Monthly Average	Maximum at any time
a.	Oil and Grease	mg/l	10	20
b.	Settleable Solids	ml/l-hr	0.1	0.2
c.	Total Chlorine Residual	mg/l	--	0.0

4. **Permit Compliance:** The Discharger shall comply with all sections of this Order immediately upon adoption.
5. **Effluent Monitoring:** The Discharger shall initiate a monitoring program using appropriate USEPA methods and detection limits, to evaluate the compliance status for all constituents listed in Effluent Limitations in Section B. Monitoring for constituents shown in Section B shall be performed during all periods of surface water discharge.
6. **Operations and Maintenance Manual:** The discharger shall review, and update as necessary, its Operations and Maintenance Manual, annually, or within 90 days of completion of any significant facility or process changes. The discharger shall submit to the Board, by April 15 of each year, a letter describing the results of the review process including an estimated time schedule for completion of any revisions determined necessary, and a description or copy of any completed revisions.
7. **Contingency Plan:** Annually, the discharger shall review and update as necessary, its Contingency Plan as required by Board Resolution 74-10 (Attachment C). The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or adequately implement a contingency plan will be the basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code. Plan revisions, or a letter stating that no changes are needed, shall be submitted to the Board by April 15 of each year.
8. **Treatment Facilities Evaluation Program:** The Discharger shall implement a program to regularly review and evaluate its wastewater collection, treatment and disposal facilities in order to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, in order to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the discharger's service responsibilities. A Treatment Facilities Evaluation Program report discussing the status of this evaluation program, including any

recommended or planned action, shall be submitted to the Board by April 15 of each year.

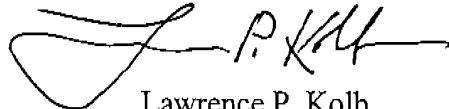
9. **Bacterial Assessment Study:** The Discharger shall conduct a Bacterial Assessment Study in accordance with a schedule established in the Monitoring Plan and agreed to by the Executive Officer, and in accordance to Chapter II.B of the Ocean Plan.

<b>Submit Monitoring proposal by:</b>	<b>May 31, 2000</b>
<b>Submit Monitoring Plan by:</b>	<b>August 31, 2000</b>
<b>Submit Status Report:</b>	<b>Quarterly</b>
<b>Submit Final Report:</b>	<b>May 31, 2005</b>

10. **Self-monitoring Program:** The Discharger shall comply with the Self-Monitoring Program (Attachment D) for this order, as adopted by the Board and as may be amended by the Executive Officer.
11. **Standard Provisions and Reporting Requirements:** The Discharger shall comply with all applicable items of the "Standard Provisions and Reporting Requirements" dated August 1993 (Attachment E).
12. **Change in Control or Ownership:** In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.
13. **Permit Transfer:** To assume operation of this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. (Refer to Standard Provisions, referenced above). The request must contain the requesting entity's full legal name, the address and telephone number of the persons responsible for contact with the Board and a Statement. The statement shall comply with the signatory paragraph described in the Standard Provisions and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code.
14. **Permit Expiration:** This Order expires on March 15, 2005. The discharger must file a report of waste discharge in accordance with Title 23, Division 3, Chapter 9, Article 3, or the California Administrative Code not later than 180 days before this expiration date as application for reissuance of waste discharge requirements.
15. This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective immediately upon adoption, provided the Regional Administrator, EPA has no objection. If the Regional Administrator

objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Lawrence P. Kolb, Assistant Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on March 15, 2000.

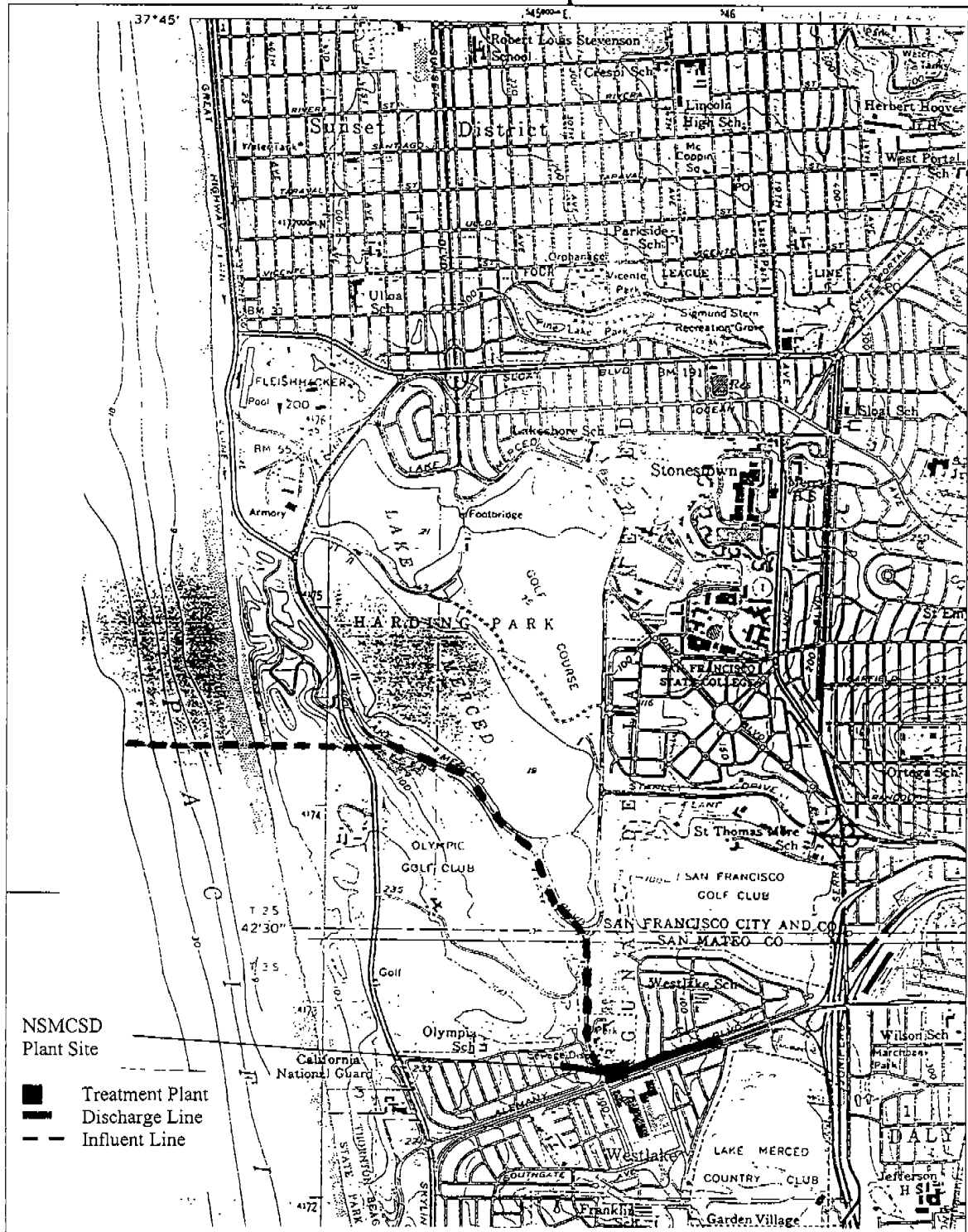
A handwritten signature in black ink, appearing to read 'L.P. Kolb', with a large, stylized initial 'L'.

Lawrence P. Kolb  
Assistant Executive Officer

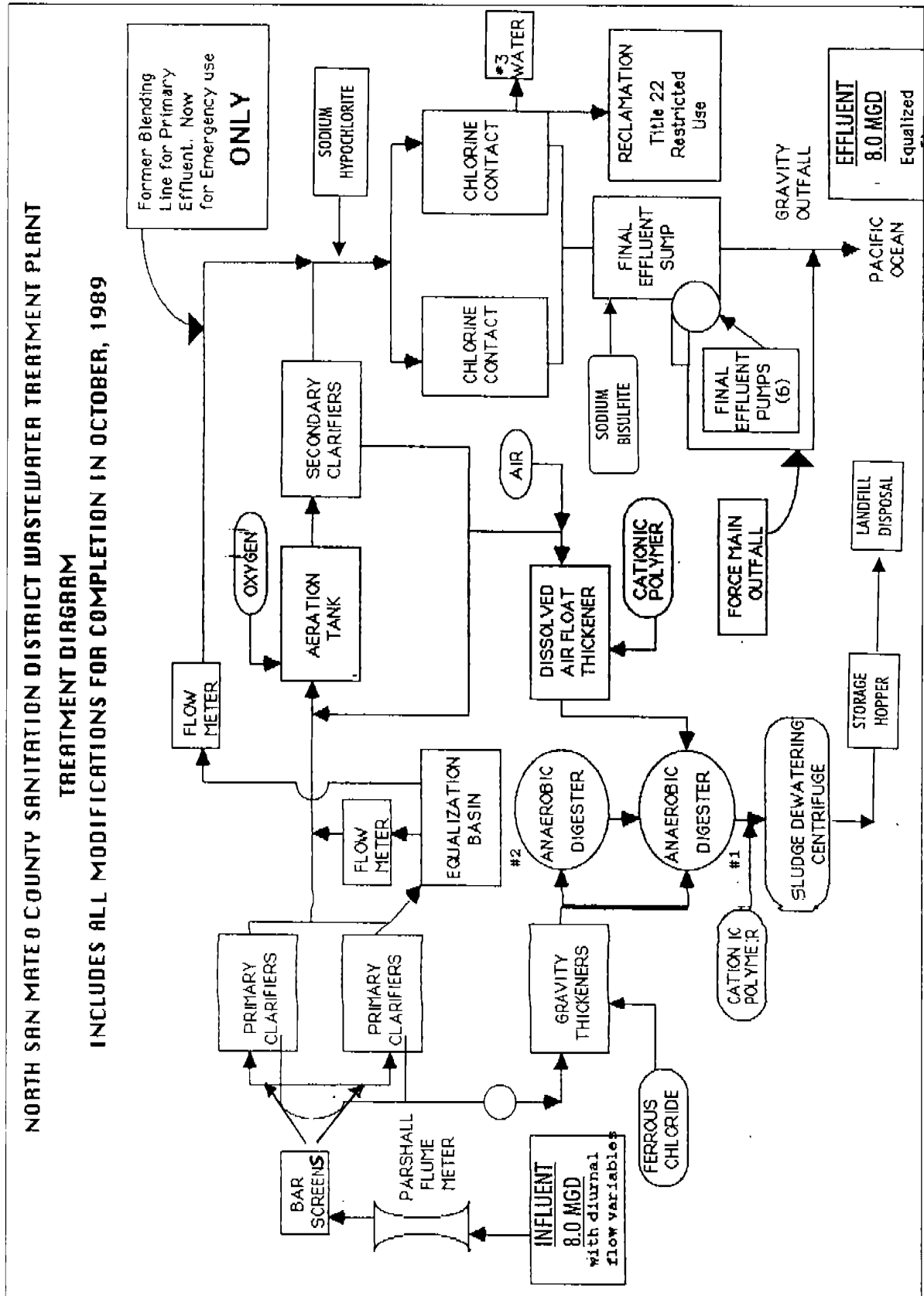
Attachments:

- A. Location/Site Maps
- B. Process Schematic
- C. Contingency Plan - Regional Water Board Resolution No. 74-10
- D. Self-monitoring Program
- E. Regional Water Board NPDES Standard Provisions and Reporting Requirements - August 1993

# Attachment A Location/Site Map



# Attachment B Process Schematic



**Attachment C**

STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

RESOLUTION NO. 74-10

POLICY REGARDING WASTE DISCHARGER'S RESPONSIBILITIES TO DEVELOP  
AND IMPLEMENT CONTINGENCY PLANS TO ASSURE CONTINUOUS  
OPERATION OF FACILITIES FOR THE COLLECTION, TREATMENT, AND  
DISPOSAL OF WASTE

WHEREAS, this Regional Board has adopted policies and requirements stating its intent to protect the beneficial water uses within the San Francisco Bay Region and prohibiting the discharge of untreated or inadequately treated wastes; and

WHEREAS, conditions including process failure, power outage, employee strikes, physical damage caused by earthquakes, fires, vandalism, equipment and sewer line failures, and strikes by suppliers of chemicals, etc., or maintenance services can result in the discharge of untreated or inadequately treated wastes; and

WHEREAS, the development and implementation of contingency plans for the operation of waste collection, treatment, and disposal facilities under such conditions should insure that facilities remain in, or are rapidly returned to, operation in the event of such an incident and measures are taken to clean up the effects of untreated or inadequately treated wastes.

NOW, THEREFORE BE IT RESOLVED, that this Regional Board will require each discharger as a provision of its NPDES Permit to submit within 120 days after the adoption of the permit a contingency plan acceptable to the Regional Board's Executive Officer to include at least the following:

- A. Provision of personnel for continued operation and maintenance of sewerage facilities during employee strikes or strikes against contractors providing services.
- B. Maintenance of adequate chemicals or other supplies and spare parts necessary for continued operation of sewerage facilities.
- C. Provisions of emergency standby power.
- D. Protection against vandalism.
- E. Expeditious action to repair failures of or damage to equipment and sewer lines.

F. Report of spills and discharges of untreated or inadequately treated wastes including measures taken to clean up the effects of such discharges.

G. Programs for maintenance replacement and surveillance of physical condition of equipment, facilities, and sewer lines.

BE IT FURTHER RESOLVED, pursuant to Section 13267 and 13268, dischargers with NPDES Permits now in effect are required to develop and submit a contingency plan as described above, by December 1, 1974.

BE IT FURTHER RESOLVED, that the discharge of pollutants in violation of an NPDES Permit where a discharger has failed to develop and implement a contingency plan as described above will be the basis for considering the discharge a willful and negligent violation of the Permit and action pursuant to Section 13387 of the California Water Code.

BE IT FURTHER RESOLVED that it is the intent of the Regional board to eventually require all waste dischargers in the San Francisco Bay Region to develop contingency plans, and those not specifically covered by this resolution are urged to voluntarily develop and implement plans including the above named elements.

I, Fred H. Dierker, Executive officer, do hereby certify the foregoing is a full, true and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 16, 1974.

A handwritten signature in dark ink, appearing to read "Fred H. Dierker", is written over a solid horizontal line.

FRED H. DIERKER  
Executive Officer



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

NORTH SAN MATEO COUNTY SANITATION DISTRICT  
DALY CITY  
SAN MATEO COUNTY

NPDER PERMIT NO. CA0037737  
ORDER NO. 00-017

CONSISTS OF

PART A,  
DATED AUGUST 1993

AND

PART B  
DATED MARCH 15, 2000

**PART B**  
**NORTH SAN MATEO COUNTY SANITATION DISTRICT**

**I. DESCRIPTION OF SAMPLING STATIONS**

**A. INFLUENT AND INTAKE**

<u>Station</u>	<u>Description</u>
A-001	At any point in the treatment facility's headwork at which all waste tributary to the system is present, preceding any phase of treatment, and exclusive of any return flows or process side streams.

**B. EFFLUENT**

<u>Station</u>	<u>Description</u>
E-001	At any point in the treatment facilities between the point of discharge and the point at which all waste from the treatment plant is present following dechlorination.
E-001D	At any point in the treatment facilities after disinfection is complete and prior to dechlorination.

**C. RECEIVING WATERS**

Receiving water monitoring is conducted through a coordinated effort with the City of San Francisco at the following locations. Sampling will be conducted annually in the fall during the period when sediments are least disturbed and may show the highest concentrations of contaminants.

Station	Description	
	Latitude	Longitude
Fixed Sampling Locations		
1	37 42 12.00	-122 34 31.20
2	37 42 37.80	-122 34 30.00
4	37 42 42.00	-122 35 42.00
6	37 40 00.00	-122 32 15.00
25	37 42 13.80	-122 34 30.00
28	37 41 54.00	-122 34 28.80
31	37 43 28.80	-122 34 01.80
Randomized Sampling		

Locations		
R1	37 52 04.77	-122 38 28.60
R2	37 51 06.14	-122 36 00.87
R3	37 51 04.65	-122 38 50.77
R4	37 50 53.96	-122 40 45.11
R5	37 50 15.84	-122 37 12.27
R6	37 50 11.61	-122 35 41.45
R7	37 49 40.86	-122 39 18.05
R8	37 49 19.20	-122 41 25.50
R9	37 48 31.68	-122 37 29.76
R10	37 47 48.31	-122 29 57.44
R11	37 47 10.02	-122 30 46.18
R12	37 47 07.88	-122 36 57.88
R13	37 46 39.77	-122 34 22.04
R14	37 46 29.37	-122 38 38.38
R15	37 46 23.73	-122 32 08.26
R16	37 45 39.83	-122 37 04.52
R17	37 45 33.87	-122 38 55.98
R18	37 45 24.69	-122 33 44.13
R19	37 45 00.01	-122 39 56.01
R20	37 44 46.38	-122 35 55.51
R21	37 43 43.07	-122 31 11.61
R22	37 43 04.34	-122 38 42.51
R23	37 42 59.44	-122 32 47.41
R24	37 42 56.50	-122 34 15.08
R25	37 42 41.24	-122 36 28.29
R26	37 42 33.84	-122 31 08.82
R27	37 42 15.49	-122 34 55.24
R28	37 41 35.66	-122 32 11.82
R29	37 41 20.89	-122 36 06.47
R30	37 40 55.35	-122 33 29.05
R31	37 40 56.18	-122 37 43.15
R32	37 39 31.65	-122 33 41.41
R33	37 39 14.63	-122 32 04.75
R34	37 38 02.91	-122 32 27.99
R35	37 37 42.23	-122 36 40.08
R36	37 37 34.73	-122 33 53.51
R37	37 37 00.97	-122 36 55.75
R38	37 36 52.15	-122 35 28.81
R39	37 36 32.16	-122 32 01.35
R40	37 36 16.73	-122 33 03.03

D. OVERFLOWS AND BYPASSES

<u>Station</u>	<u>Description</u>
Ov-1 through OV-'n'	Bypass or overflows from manholes, pump stations, or collection systems.

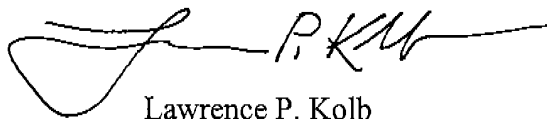
REPORTING: Reports shall be submitted monthly and include date, time quantity and period of each overflow or bypass and measures taken or planned to prevent future occurrences.

II. SCHEDULE OF SAMPLING, ANALYSIS, AND OBSERVATIONS

The schedule of sampling, analysis, and observations shall be that given as Table I.

I, Lawrence P. Kolb, Assistant Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

- 1.Has been developed in accordance with the procedure set forth in the Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 00-017.
- 2.Is effective on March 15, 2000.
- 3.Maybe reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the dischargers and revisions will be ordered by the Executive Officer.



Lawrence P. Kolb  
Assistant Executive Officer

Attachments:

Table I and footnotes  
Part A, August 1993

Table I  
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS (1)

Sampling Station		A-001	E-001			E-001D		All OV Station	All C Station
TYPE OF SAMPLE	Unit	C-24	G(2)	C-24(2)	Cont	G	C-24		
Flow Rate	mgd	D			D				
BOD, 5-day, 20°C	mg/l & kg/day	W		W					
Chlorine Residual & Dosage (3)	mg/l & kg/day		2H or Cont.			2H or Cont.			
Total Suspended Solids	mg/l & kg/day	2/W		2/W					
Oil & Grease (4)	mg/l & kg/day	Q	Q						
Settleable Matter	mg/l-hr			2/W					
Turbidity	NTU			D					
Fish Toxicity 96-hr. LC 50 (5)	Tu			2M					
Ammonia Nitrogen & Un-ionized Ammonia (6)	mg/l & kg/day			2M					Y
pH (6)	pH units		D	2M					Y
Dissolved Oxygen (6)	mg/l & % saturation		D	2M					Y
Temperature (6)	°C		D	2M					Y
Coliform (Total or Fecal)	MPN/100 ml					W			Y
Salinity	ppt								Y
Sulfides (If DO<5.0 mg/l) Total & Dissolved	mg/l		D						
All Applicable Standard Observations			D					E	Y
Daily Rainfall									D
Dewatered Sludge		(7)							
Arsenic	µg/l			Q (8)					
Cadmium	µg/l			Q (8)					
Chromium (Hexavalent)	µg/l			Q (8)					
Chromium (Trivalent)	µg/l			Q (8)					
Copper	µg/l			Q (8)					
Lead	µg/l			Q (8)					

Table I (Continued)  
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS (1)

Sampling Station		A-001	E-001			E-001D		All OV Station	All C Station
TYPE OF SAMPLE	Unit	C-24	G(2)	C-24(2)	Cont	G	C-24	O	O
Mercury	µg/l			Q (8)					
Nickel	µg/l			Q (8)					
Selenium	µg/l			Q (8)					
Silver	µg/l			Q (8)					
Zinc	µg/l			Q (8)					
Cyanide	µg/l			Q (8)					
Phenolic Compounds (non-chlorinated)	µg/l			Q (8)					
Chlorinated Phenolics	µg/l			Q (8)					
Endosulfan	µg/l			Y (8)					
Endrin	µg/l			Y (8)					
HCH*	µg/l			Y (8)					
Radioactivity				Y (8)					
Acrolein	µg/l			Y (8)					
Antimony	µg/l			Y (8)					
Bis(2-chloroethoxy) methane	µg/l			Y (8)					
Bis (2-chloroisopropyl) ether	µg/l			Y (8)					
Chlorobenzene	µg/l			Y (8)					
Di-n-butyl phthalate	µg/l			Y (8)					
Dichlorobenzenes	µg/l			Y (8)					
1,1-dichloroethylene	µg/l			Y (8)					
Diethyl phthalate	µg/l			Y (8)					
Dimethyl phthalate	µg/l			Y (8)					
4,6-dinitro-2- methylphenol	µg/l			Y (8)					
2,4-dinitrophenol	µg/l			Y (8)					
Ethylbenzene	µg/l			Y (8)					
Fluoranthene	µg/l			Y (8)					
Hexachlorocyclopenta diene	µg/l			Y (8)					
Isophorone	µg/l			Y (8)					
Nitrobenzene	µg/l			Y (8)					
Thallium	µg/l			Y (8)					
Toluene	µg/l			Y (8)					
1,1,2,2- tetrachloroethane	µg/l			Y (8)					
Tributyltin	µg/l			Y (8)					
1,1,1-trichloroethane	µg/l			Y (8)					
1,1,2-trichloroethane	µg/l			Y (8)					

Table I (Continued)  
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS (1)

Sampling Station		A-001	E-001			E-001D		All OV Station	All C Station
TYPE OF SAMPLE	Unit	C-24	G(2)	C-24(2)	Cont	G	C-24	O	O
Acrylonitrile	µg/l			Y (8)					
Aldrin	µg/l			Y (8)					
Benzene	µg/l			Y (8)					
Benzidine	µg/l			Y (8)					
Beryllium	µg/l			Y (8)					
Bis(2-chloroethyl) ether	µg/l			Y (8)					
Bis(2-ethylhexyl) phthalate	µg/l			Y (8)					
Carbon Tetrachloride	µg/l			Y (8)					
Chlordane	µg/l			Y (8)					
Chloroform	µg/l			Y (8)					
DDT	µg/l			Y (8)					
1,4-dichlorobenzene				Y (8)					
3,3-dichlorobenzidine	µg/l			Y (8)					
1,2-dichloroethane	µg/l			Y (8)					
Dichloromethane	µg/l			Y (8)					
1,3-dichloropropene	µg/l			Y (8)					
Dieldrin	µg/l			Y (8)					
2,4-dinitrotoluene	µg/l			Y (8)					
1,2-diphenylhydrazine	µg/l			Y (8)					
Halomethanes	µg/l			Y (8)					
Heptachlor	µg/l			Y (8)					
Hexachlorobenzene	µg/l			Y (8)					
Hexachlorobutadiene	µg/l			Y (8)					
Hexachloroethane	µg/l			Y (8)					
N- nitrosodimethylamine	µg/l			Y (8)					
N- nitrosodiphenylamine	µg/l			Y (8)					
PAHs	µg/l			Y (8)					
PCBs	µg/l			Y (8)					
TCDD equivalents	µg/l			Y (8)					
Tetrachloroethylene	µg/l			Y (8)					
Toxaphene	µg/l			Y (8)					
Trichloroethylene	µg/l			Y (8)					
2,4,6-trichlorophenol	µg/l			Y (8)					
Vinyl chloride	µg/l			Y (8)					

## LEGEND FOR TABLE

### TYPE OF SAMPLES

G = Grab sample  
 C-24 = Composite sample 24-hr  
 Cont. = Continuous sampling  
 O = Observation  
 =

### TYPE OF STATIONS

A = Treatment facility influent stations  
 E = Waste effluent stations  
 C = Receiving water stations  
 P = Treatment facilities perimeter stations  
 OV = Overflows and bypasses

### FREQUENCY OF SAMPLING

E = Each occurrence	2/H = Twice per hour	2H = Every 2 hours
H = Once each hour	2/W = 2 days per week	2D = Every 2 days
D = Once each day	5/W = 5 days per week	2W = Every 2 weeks
W = Once each week	2/M = 2 days per month	2M = Every 2 months
M = Once each month	Y = Once a year	
2/Y = Once in March and once in September		
Cont. = Continuous		
Q = Quarterly, once in March, June September and December		

## FOOTNOTES

1. During any day when bypassing occurs from any treatment unit(s) in the plant or from the outfall, the monitoring program for the effluent and any near shore discharge shall include the following in addition to the above schedule for sampling, measurement and analyses:
  - a. Composite sample for BOD and Total Suspended Solids (Influent and Effluent, for the duration of the bypass or 24 hours, whichever is shorter.)
  - b. Grab samples for Total Coliform, Settleable Matter, Oil and Grease, and Chlorine Residual (continuous or every two hours.)
  - c. Continuous monitoring of flow.
2. Grab samples shall be taken on day(s) of composite sampling.
3. Data shall be reported using forms provided or approved equivalent. Chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, grab samples shall be taken every 30 minutes until compliance is achieved.
4. In the event that sampling for oil and grease once every two weeks or less frequently shows an apparent violation of the waste discharge permit monthly average limitation (considering the result of one or two day's sampling as a monthly average), then the sampling frequency shall be increased to weekly so that a true monthly average can be computed and compliance can be determined.



5. Fish toxicity shall be determined using 96-hour static renewal fish bioassays with one of the following test species: three-spined stickleback, rainbow trout or fathead minnow.
6. Dissolved oxygen, pH, and temperature shall be tested for on the same composite sample(s) used for the bioassay(s) at the start of the bioassay(s) and at intervals of 24, 48, 72, and 96 hours after starting the bioassay(s). Ammonia nitrogen and unionized ammonia shall be tested for on the same composite sample(s) used for the bioassay(s) at the start of the bioassay test(s). The method of calculating unionized ammonia shall be indicated.
7. Daily records shall be kept of the quantity and solids contents of dewatered sludge disposed of and the location of disposal.
8. If any samples are in violation of effluent limitations or in exceedence of the performance goals, sampling shall be increased for that parameter to weekly until compliance or the performance goal is demonstrated in two successive samples.